

Bovine Tuberculosis in Michigan

Where we are today

Michael S. VanderKlok D.V.M

BOVINE TUBERCULOSIS SURVEY RESULTS



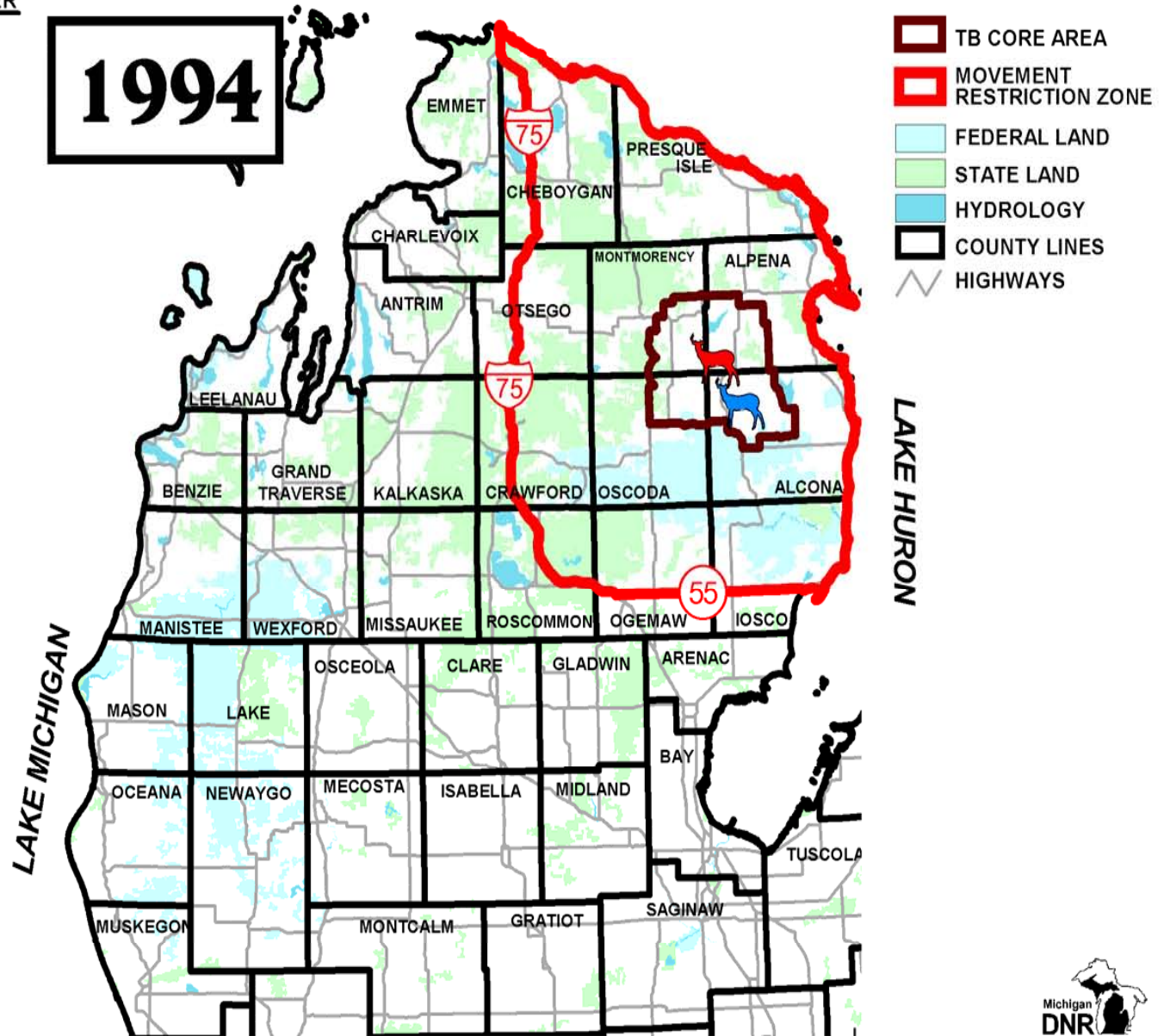
1975 POSITIVE TB DEER 1



1994 POSITIVE TB DEER 1

NUMBER

1994






LAKE HURON

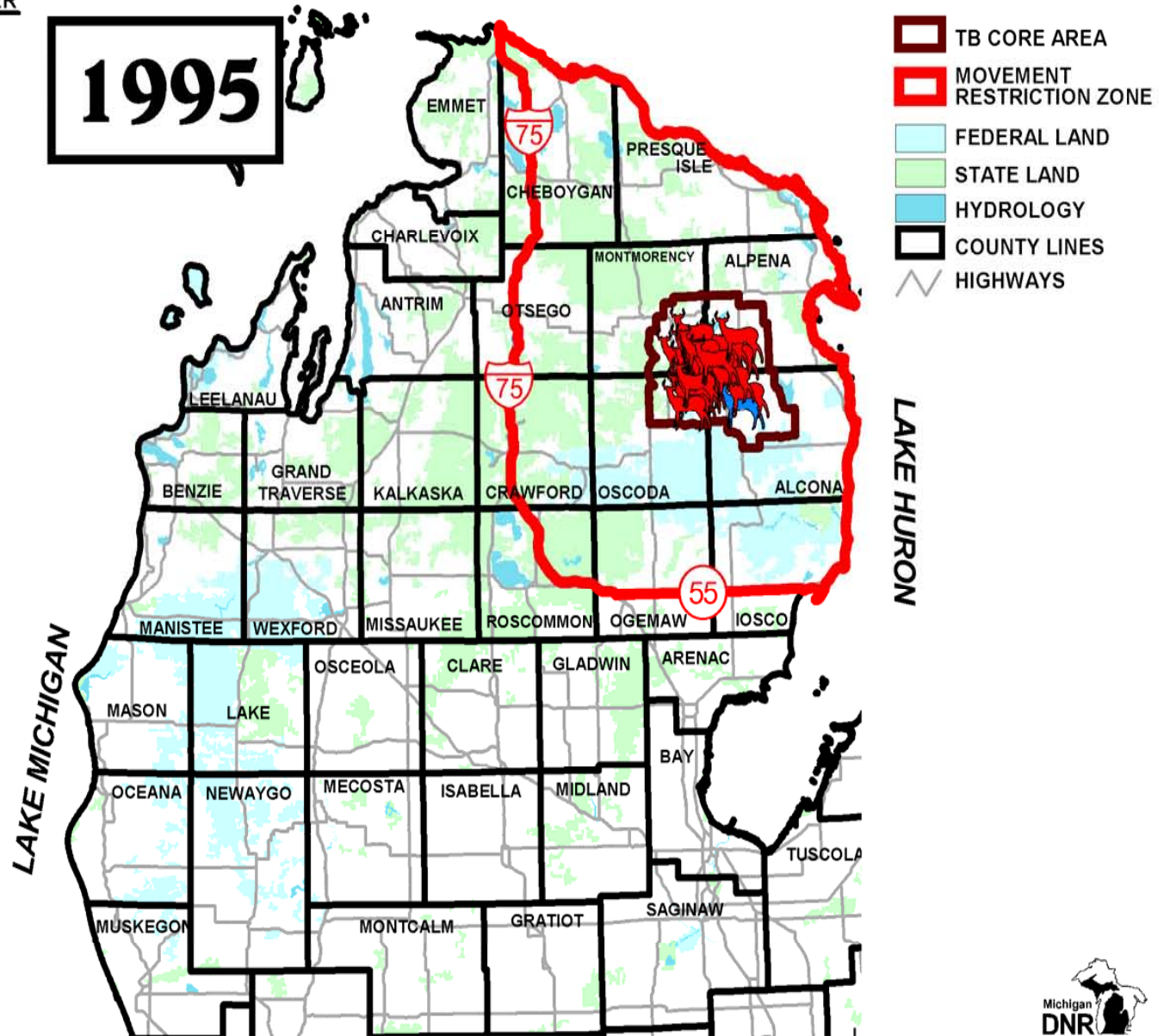
LAKE MICHIGAN







BOVINE TUBERCULOSIS SURVEY RESULTS

	NUMBER
 1975 POSITIVE TB DEER	1
 1994 POSITIVE TB DEER	1
 1995 POSITIVE TB DEER	27

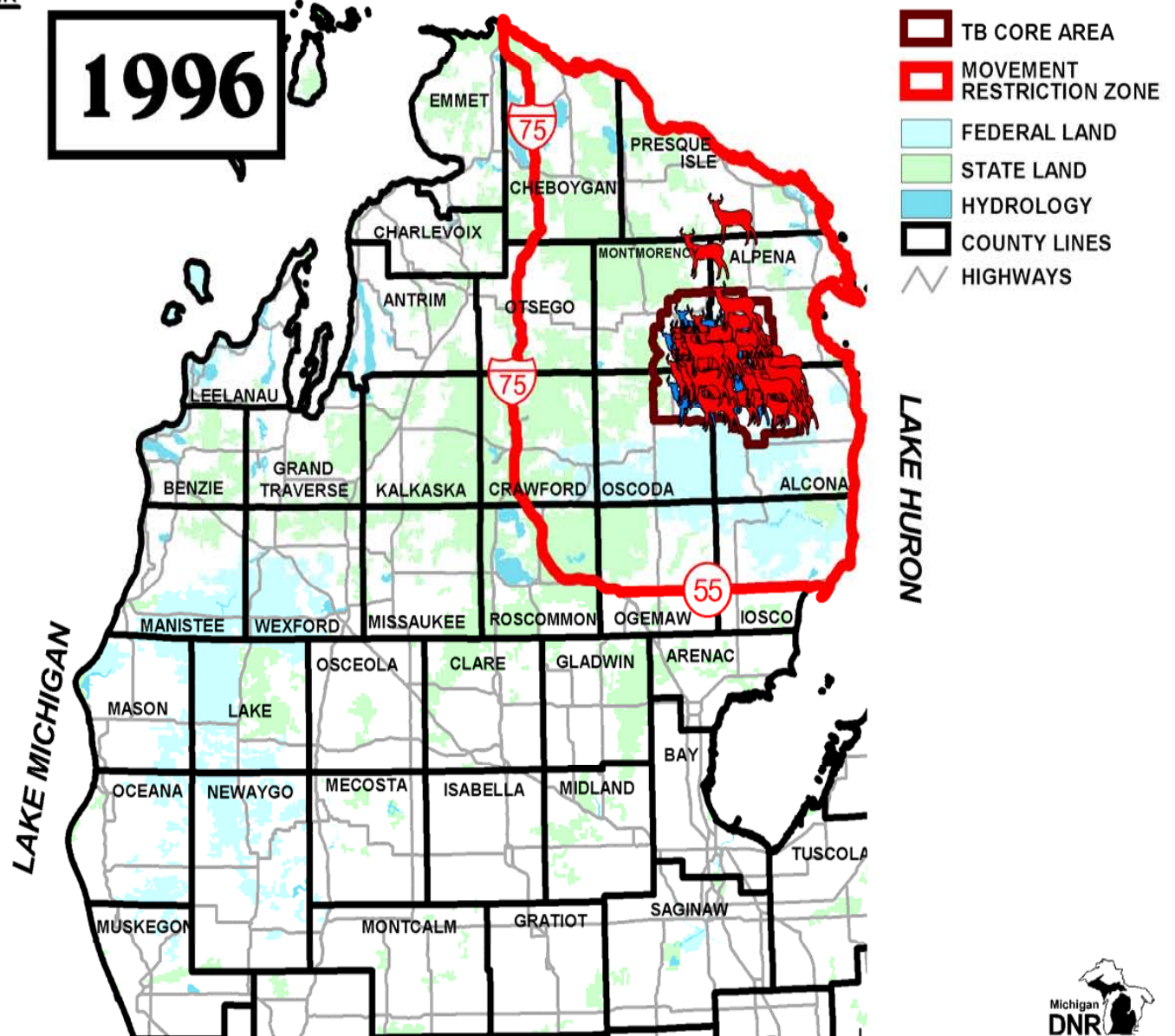
1995








BOVINE TUBERCULOSIS SURVEY RESULTS

	NUMBER
 1975 POSITIVE TB DEER	1
 1994 POSITIVE TB DEER	1
 1995 POSITIVE TB DEER	27
 1996 POSITIVE TB DEER	47

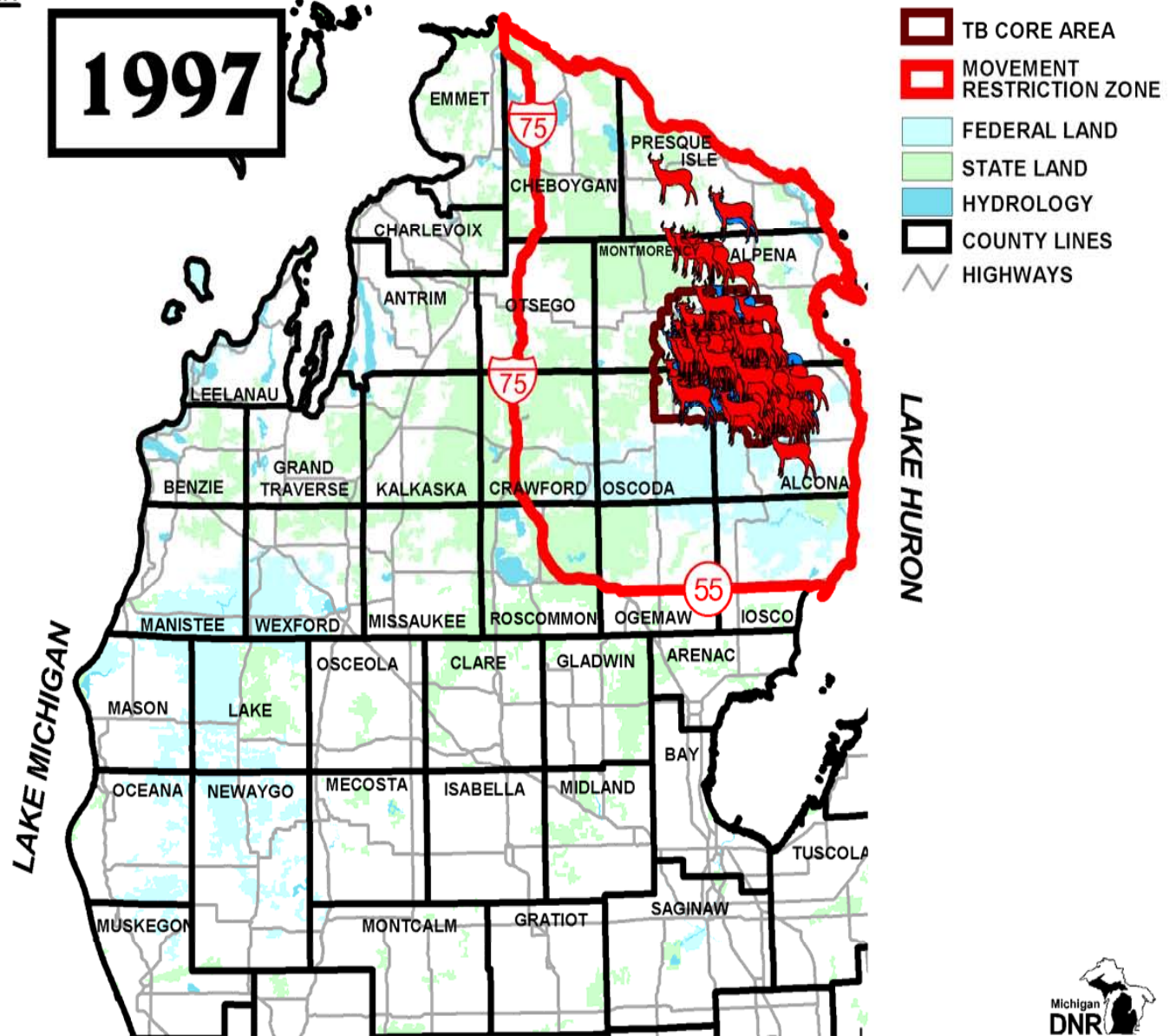
1996










BOVINE TUBERCULOSIS SURVEY RESULTS

	NUMBER
 1975 POSITIVE TB DEER	1
 1994 POSITIVE TB DEER	1
 1995 POSITIVE TB DEER	27
 1996 POSITIVE TB DEER	47
 1997 POSITIVE TB DEER	73

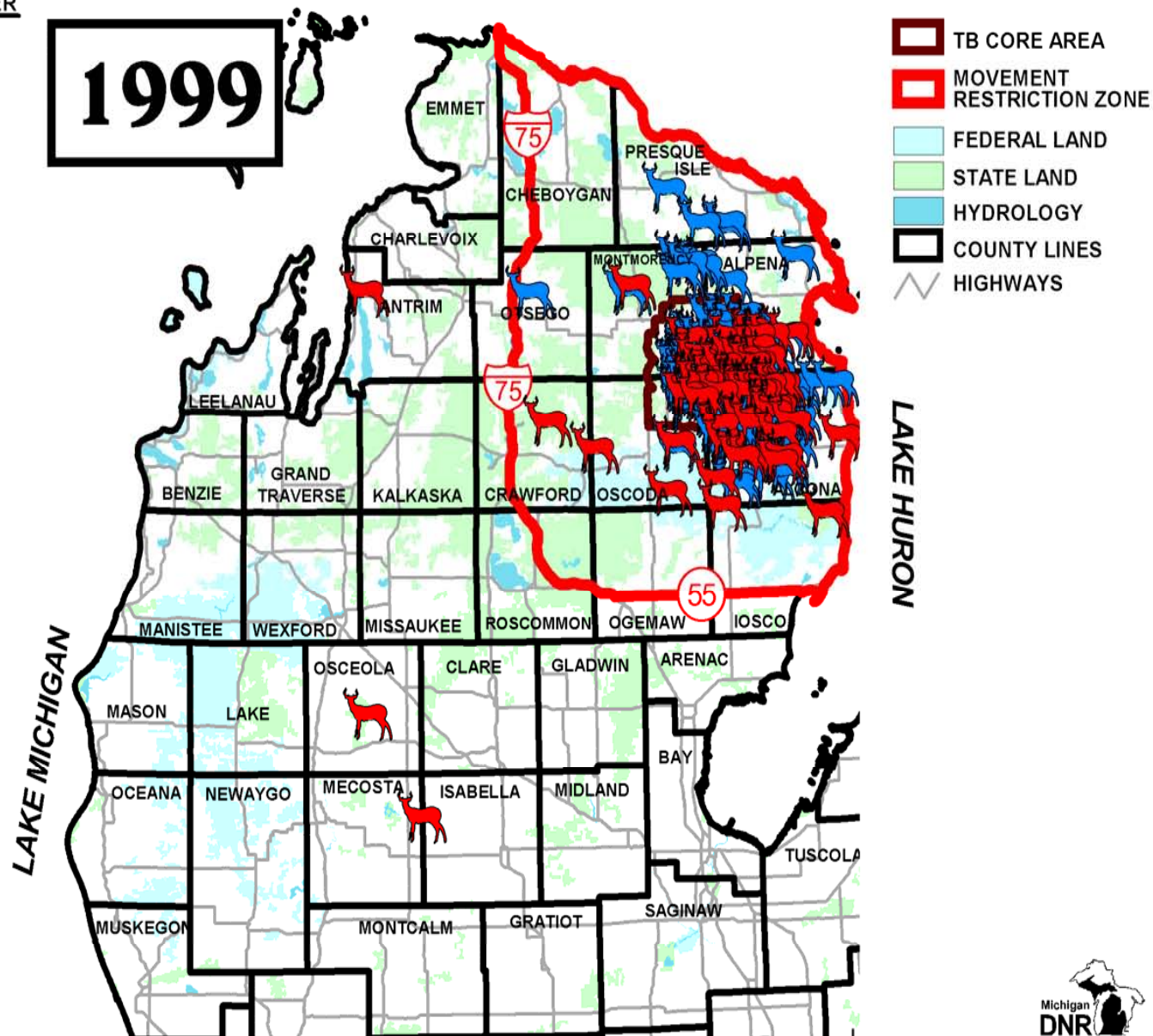
1997



BOVINE TUBERCULOSIS SURVEY RESULTS

	NUMBER
 1975 POSITIVE TB DEER	1
 1994 POSITIVE TB DEER	1
 1995 POSITIVE TB DEER	27
 1996 POSITIVE TB DEER	47
 1997 POSITIVE TB DEER	73
 1998 POSITIVE TB DEER	78
 1999 POSITIVE TB DEER	58

1999



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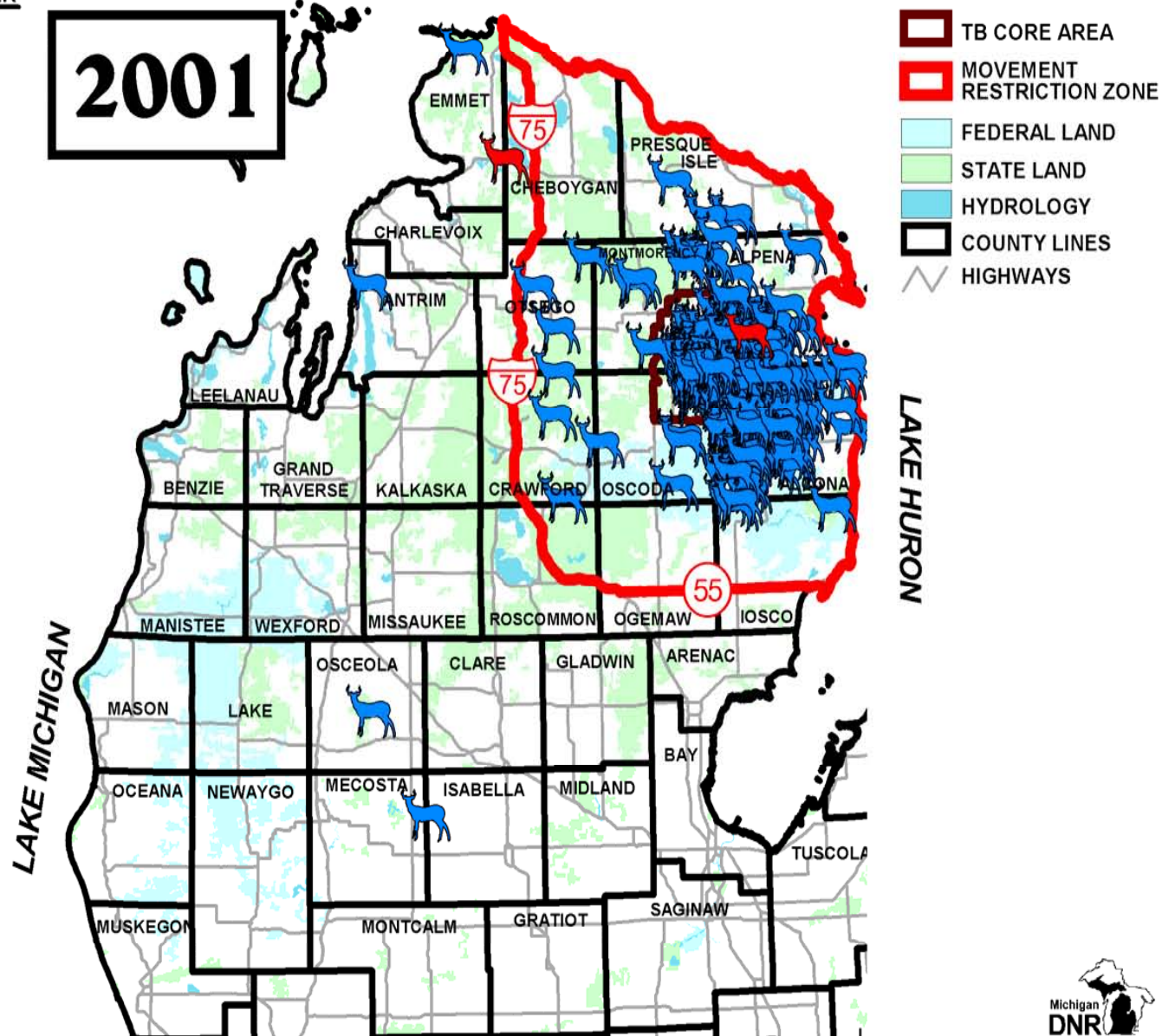
LAKE MICHIGAN



BOVINE TUBERCULOSIS SURVEY RESULTS

	NUMBER
1975 POSITIVE TB DEER	1
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1995 POSITIVE TB DEER	27
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1997 POSITIVE TB DEER	73
1998 POSITIVE TB DEER	78
1999 POSITIVE TB DEER	58
2000 POSITIVE TB DEER	53
2001 PROBE POSITIVE TB DEER	2

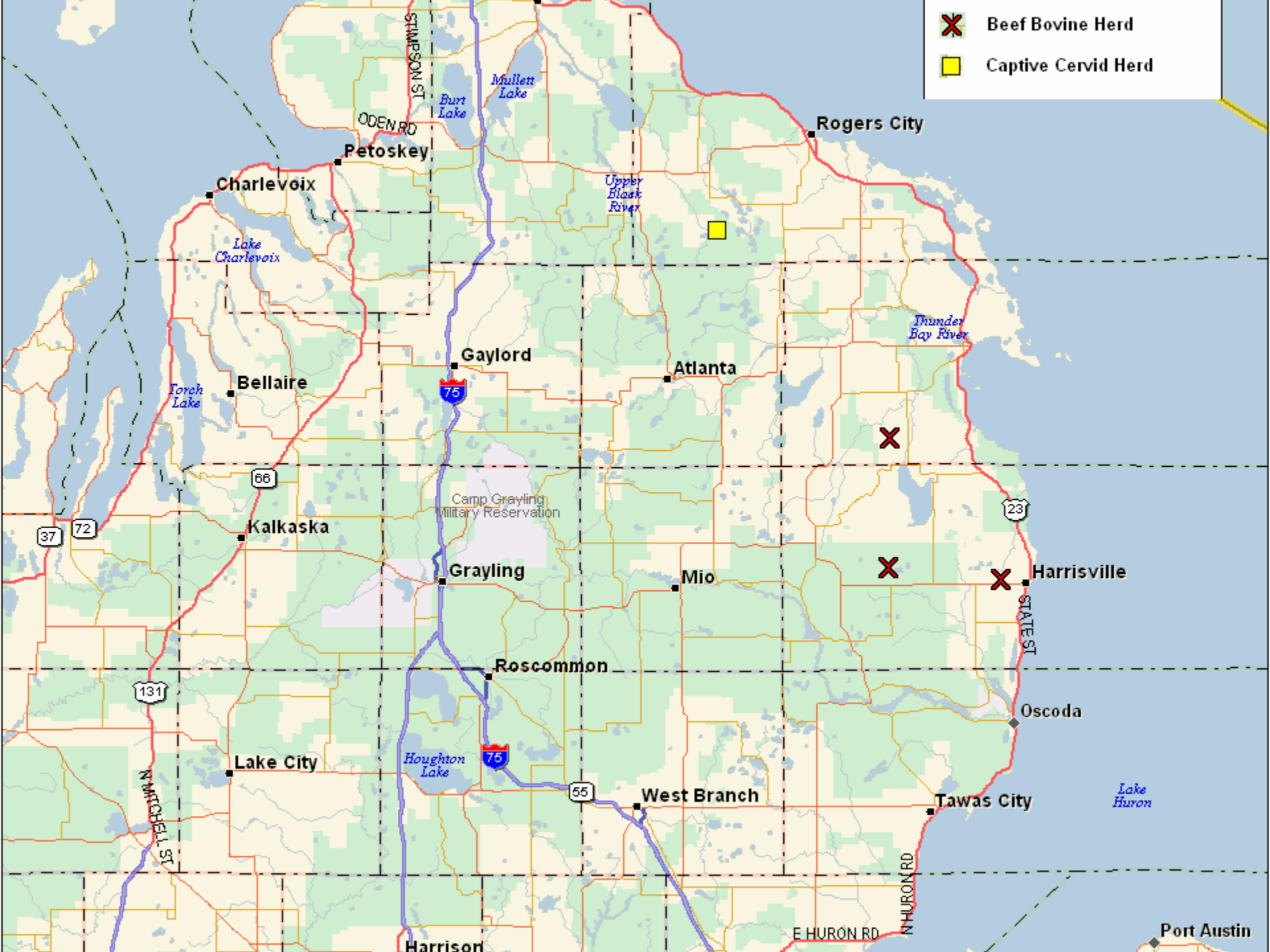
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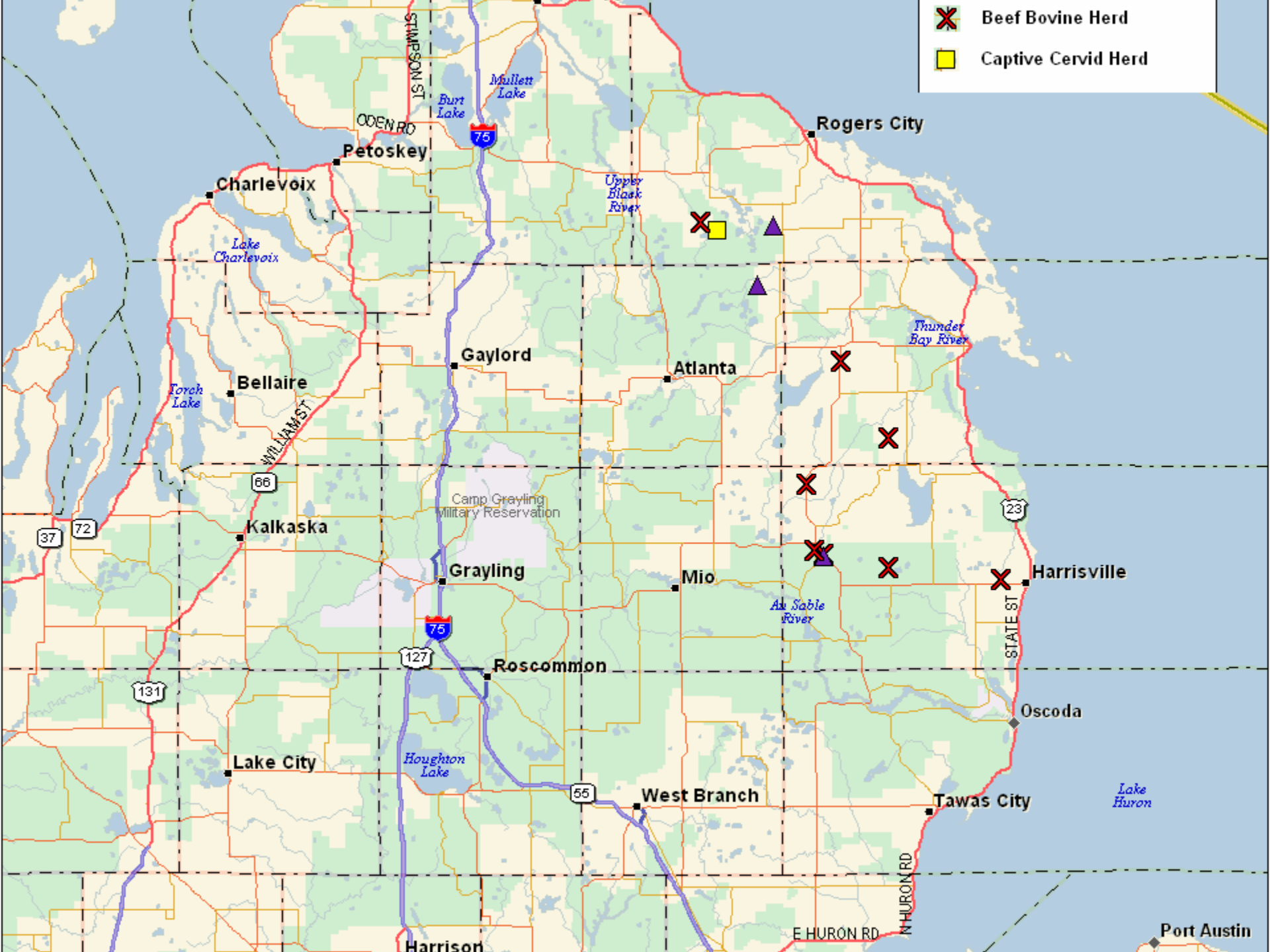


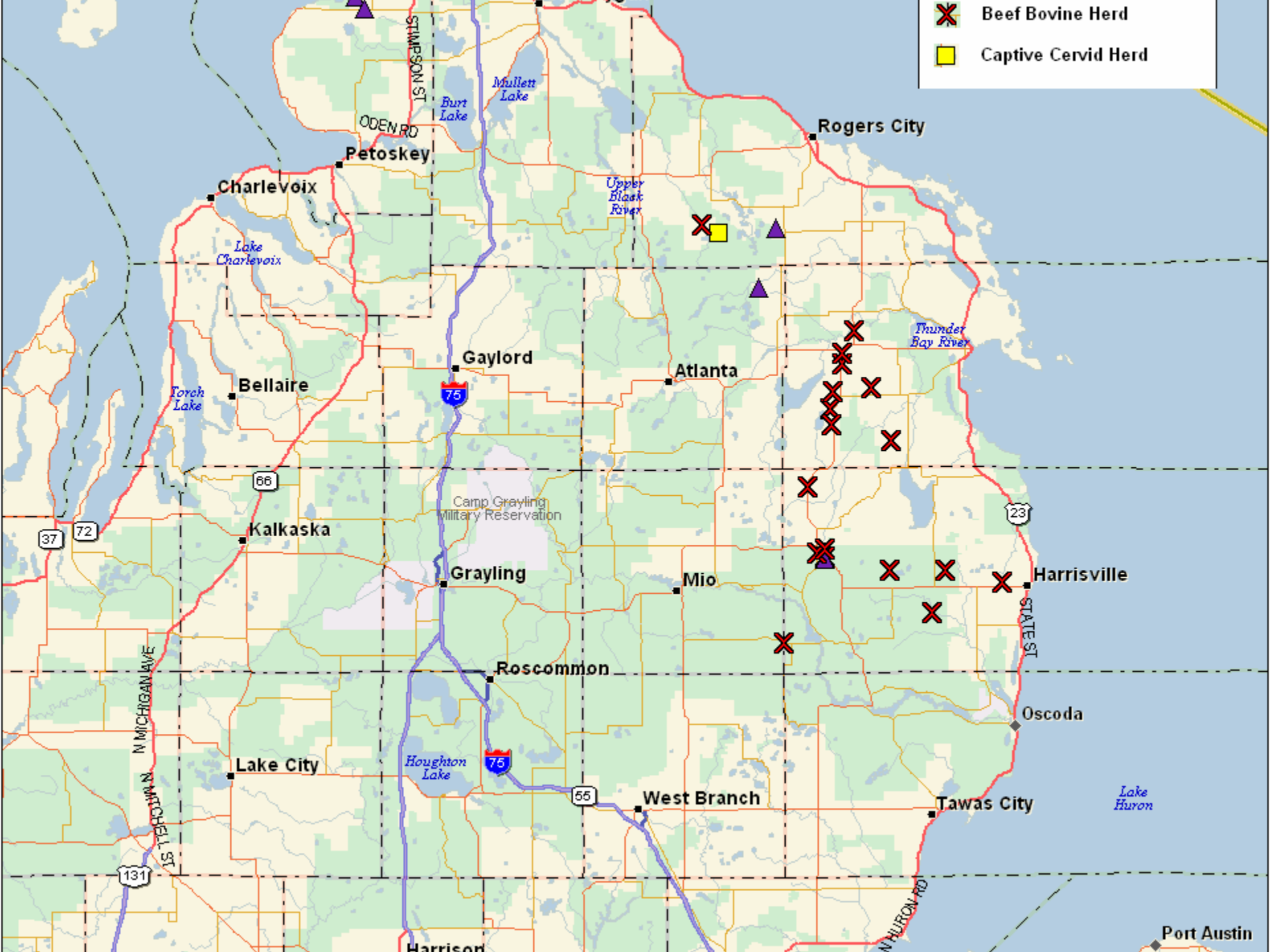
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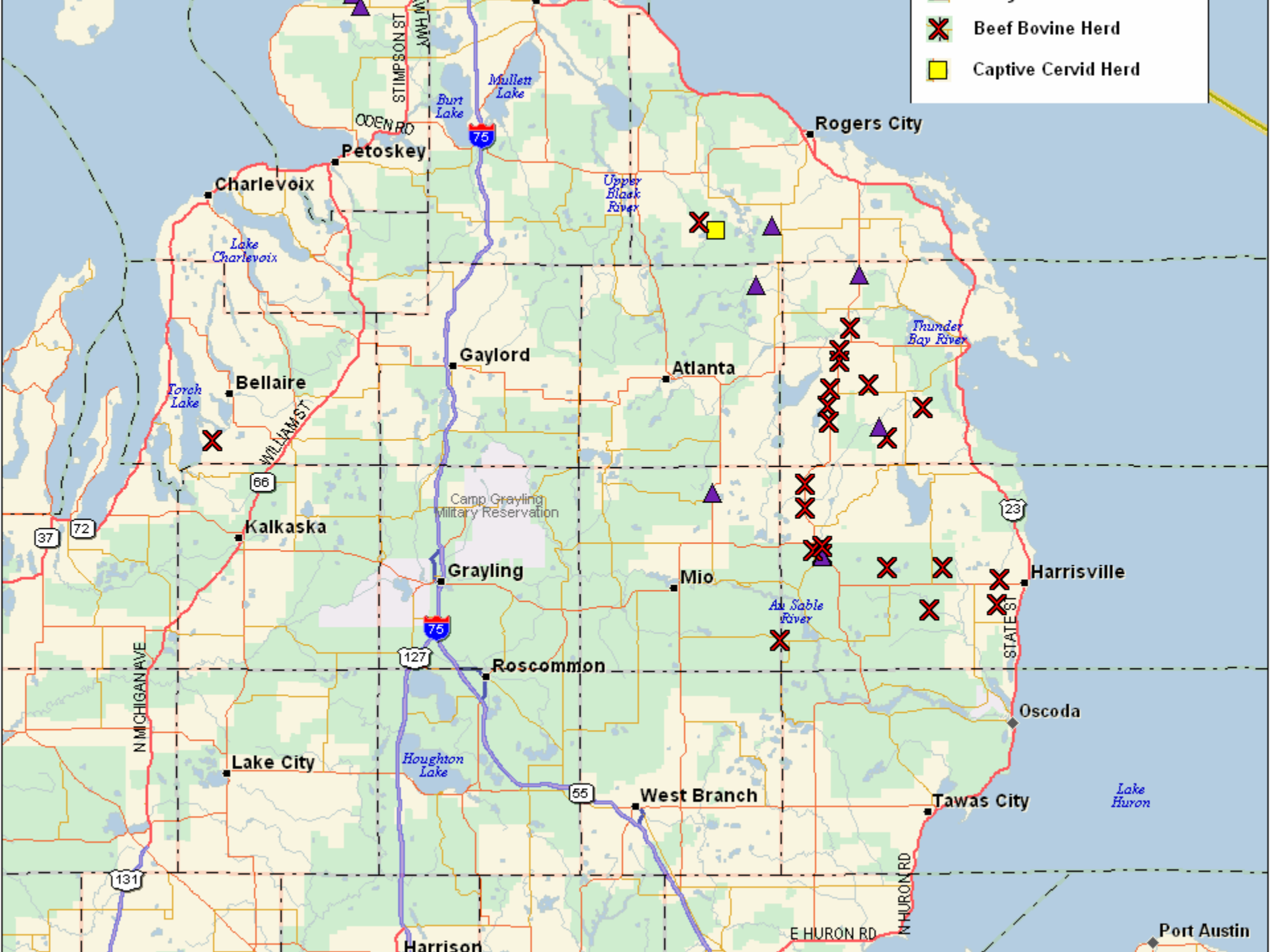
LAKE MICHIGAN

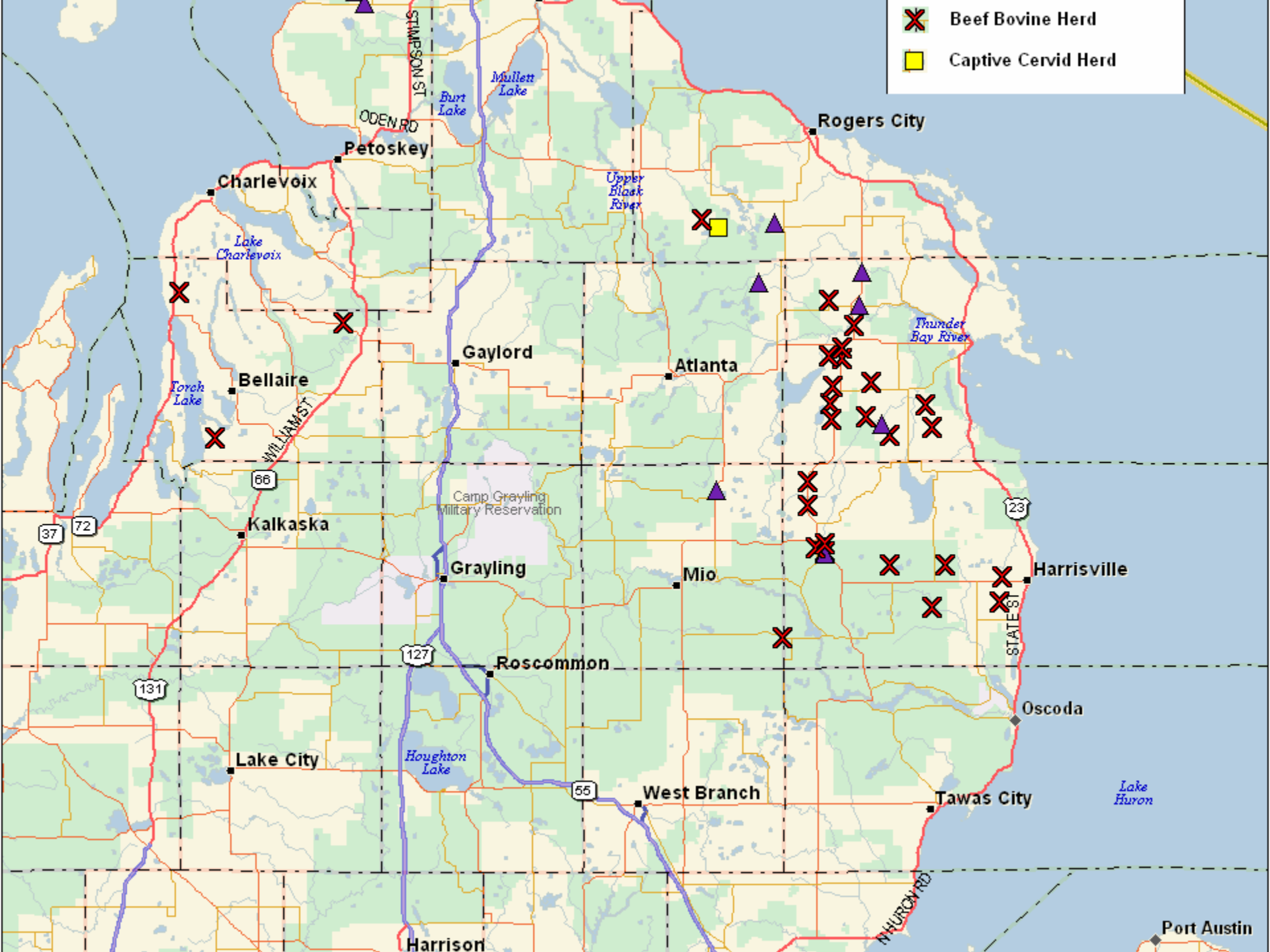


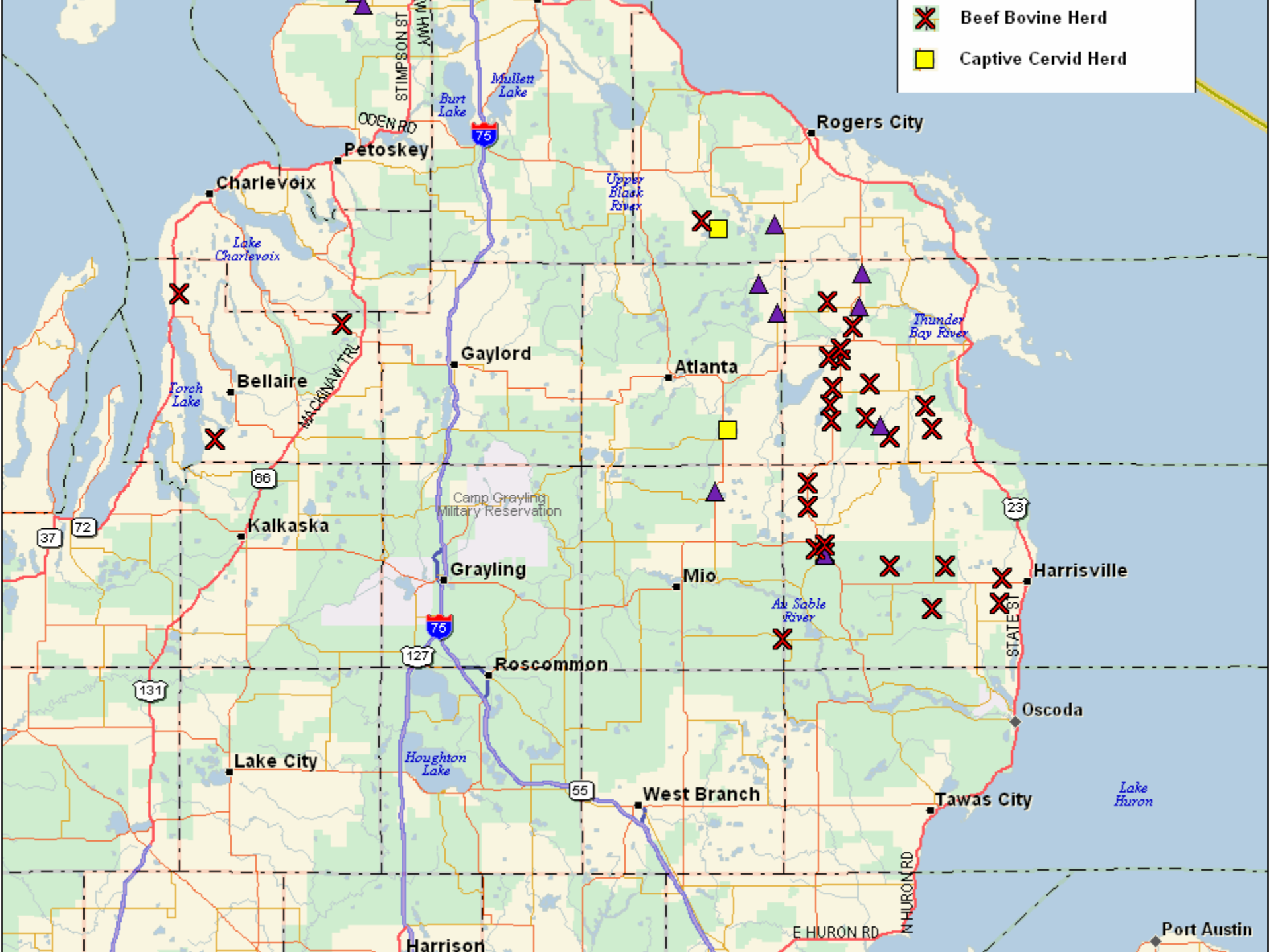








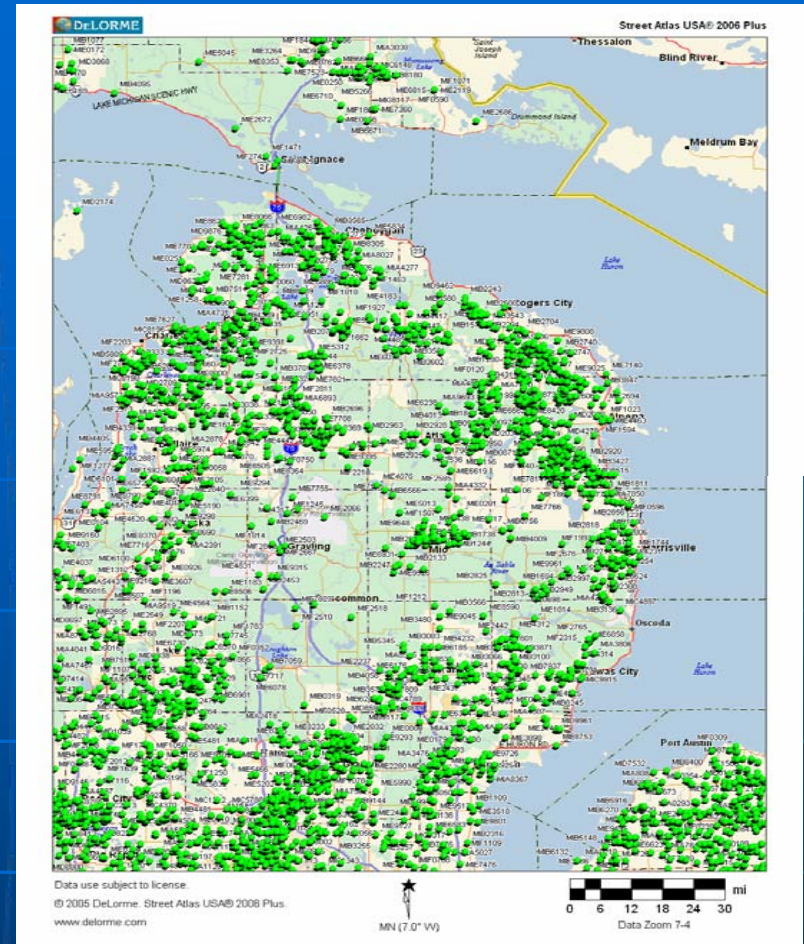




Surveillance

- Every herd in the state (2000 – 2003)
- Progressive expansion in NE MI (1996 – present)
- Annual in Entire MAZ (2004 – 2007)
- All herds in MAZ (fill gaps; 2007+)
- Random in rest of state (2003 – 2007)
- Targeted* in rest of state (2008+)

- Over 1.4 million TB tests
- 150,000 TB tests in over 3000 herd tests per year



\$5.2 million
annually

Movement Testing

Movement Testing Requirements

Movement within the Modified Accredited Zone

Cattle must comply with one of the following prior to movement:

- a) Originate directly from a bovine tuberculosis accredited free herd, or,
- b) Originate from a herd which has received a whole herd test within 60 days prior to movement, or,
- c) Receive a negative bovine tuberculosis test within 60 days prior to movement.

Calves less than 2 months of age may be moved if they originate from a herd that has completed a whole herd test within 12 months prior to movement.

Steers or spayed heifers may be moved to a registered terminal operation, or between registered terminal operations without meeting tuberculosis testing requirements.

Cattle may be moved to an FSIS approved slaughter plant, or through one concentration point to an FSIS approved slaughter plant, without meeting tuberculosis testing requirements.

Movement to another Zone within Michigan

Cattle 2 months of age and older must comply with one of the following prior to movement:

- a) Originate directly from a bovine tuberculosis accredited free herd, or,
- b) Originate from a herd that has received a negative whole herd bovine tuberculosis test within 12 months prior to movement, and receive a negative bovine tuberculosis test within 60 days prior to movement (steers or spayed heifers do not need to meet the whole herd testing requirement).

Cattle less than 2 months of age may be moved if they originate from a herd that has completed a whole herd test within 12 months prior to movement.

Cattle may be moved to an FSIS approved slaughter plant, or through one concentration point to an FSIS approved slaughter plant, without meeting tuberculosis testing requirements.

Movement Testing Requirements

Movement to another Zone within Michigan

Sexually intact cattle 6 months of age or older must meet one of the following prior to movement:

- a) Originate directly from a bovine tuberculosis accredited free herd, or,
- b) Receive a negative bovine tuberculosis test within 60 days prior to movement.

Cattle less than 6 months of age, steers and spayed heifers of any age, or cattle moving to an FSIS approved slaughter plant or through one livestock concentration point prior to movement to an FSIS approved slaughter plant, do not need to meet tuberculosis testing requirements prior to movement.

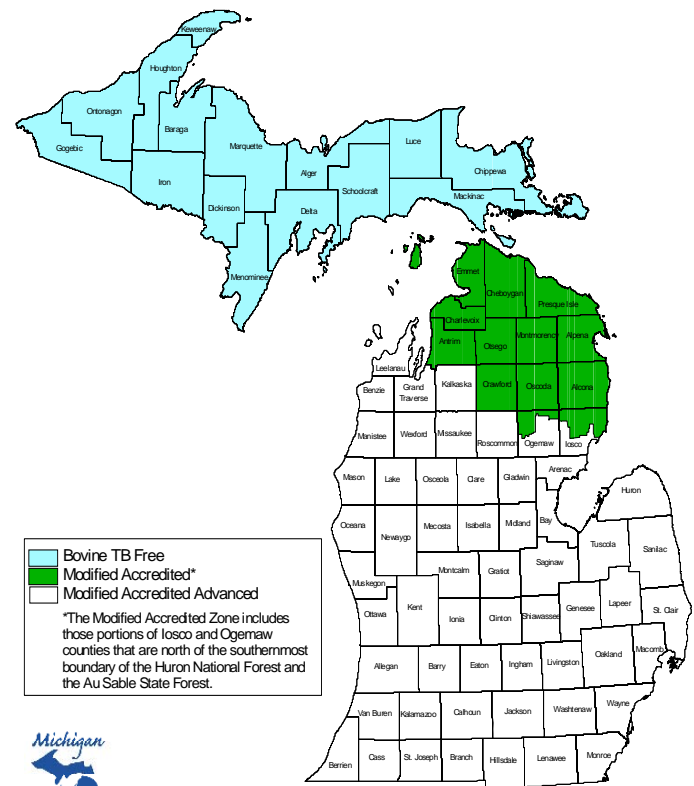
Sexually intact heifers that are moving to a registered terminal operation or a USDA approved feedlot do not need to meet tuberculosis testing requirements prior to movement.

Movement within the Modified Accredited Advanced Zone

No tuberculosis testing is required for movement of cattle within the zone, or through a livestock concentration point to a final destination within the zone.

Michigan Bovine Tuberculosis State Status

Effective September 30, 2005



Movement Tracking

- Movement certificates
 - Active tracking
 - Preapproval
 - Within MAZ
 - Between MAZ/MAAZ
- Individual Animal Identification
 - All cattle statewide
 - RFID
 - Passive Tracking systems – saleyards, slaughter plants

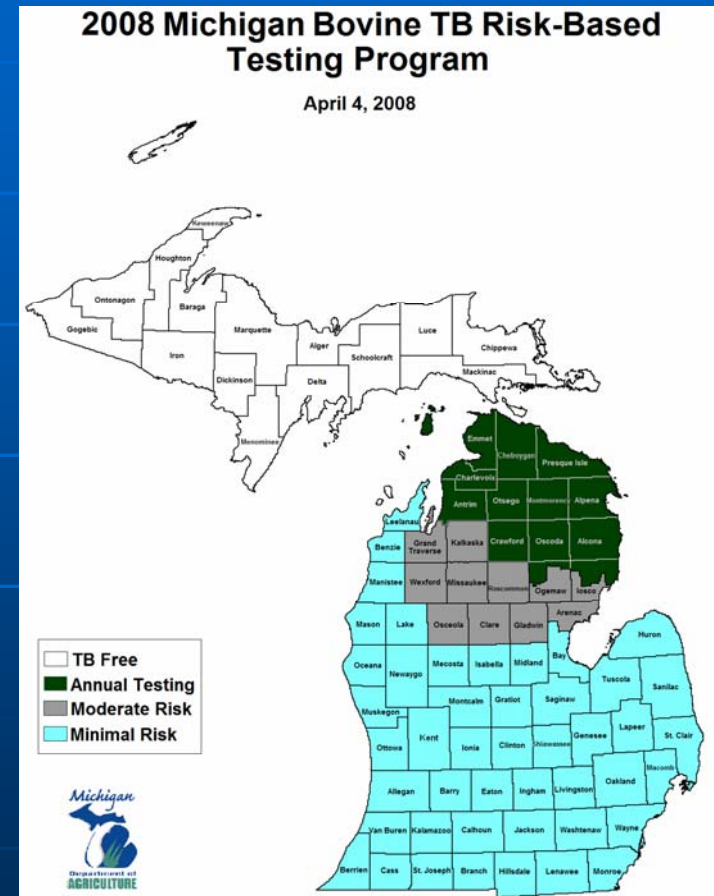
6 months

- **3000 permits**
- **Over 21,000 cattle**

(Oct 2007 – March 2008)

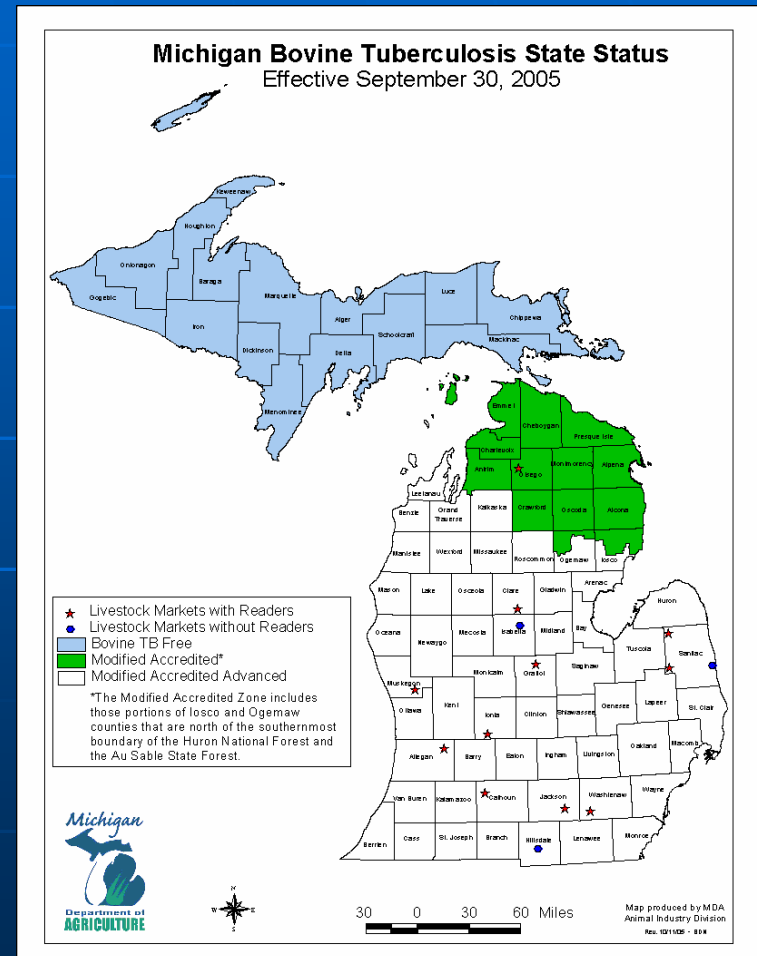
Targeted Surveillance

- Move from random system
- Based upon risks
 - Presence of TB
 - TB infected herd movements
 - Trace source
 - Trace exposed
 - Proximity to TB infected deer
 - New occurrences - point
 - Geographical – regions
- Program based on “value” of surveillance



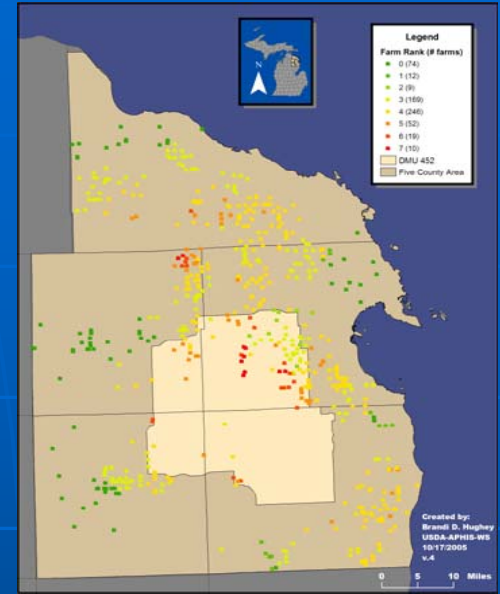
Enforcement/Monitoring

- *Mobile Surveillance Patrols
- *24 hour check point at the Mackinac Bridge
- Regulatory Personnel at saleyards
- *Reconciliation of herd inventories annually in MAZ
- *Verification audits on cattle moved to slaughter



Reducing the Risk from Wildlife

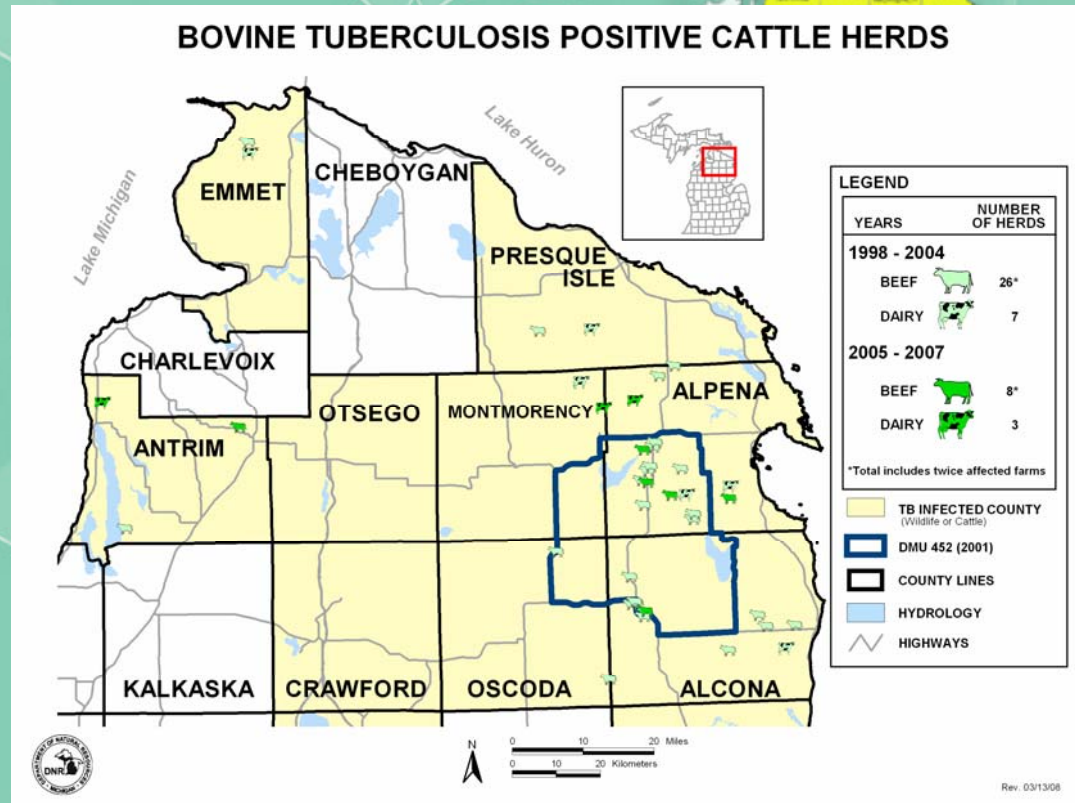
- Summary of current knowledge
- Pick up on initial risk mitigation program started in 2006
- Risk * A * Syst



Modified Accredited Zone

Overall Infection

- 44 herds/4796 total animals
- 97 total PCR positive
- 2 herds/42 (cattle) found by slaughter surveillance



Bovine Tuberculosis Positive Cattle Herds

October 1, 2007

Herd Prevalence by FY for MA Zone in Michigan

